A LIFE FOR A LEAK

By D'ESTE

The huge dam on the Black Warrior river at Pale's Bar, after two years' work, was nearly complete. Floods, unexpected delay from shortage of material, and trouble with labor had retarded the construction so that the time specified in the contract for its completion expired at noon of this bright April day.

The contract not only specified that a forfeit should be paid by the contractor if the head of water in the wheel-pits should not be of sufficient volume to run all the turbines installed, but it also provided that a premium of equal amount should be awarded were the conditions carried out within the time named.

The dam itself measured 50 feet from its crest to the bed of the river below. It was built in the form of a curve, with its convexity up stream; so that as the pressure became greater, the weight of the water —by the principle of the arch—was carried on the rocky shoulders of the mountains on either side, where the shore ends joined the cliffs.

Ordinarily the surplus water in the reservoir created by the dam would pour over the top in a semicircular sheet. About 18 feet below the crest a collar or abutment ran around the face of the dam, projecting a foot, perhaps, from the curved wall. As the water fell, instead of falling its full weight into the chasm, it struck this collar at a slant, thus relieving the blow on the foundations of the dam.

The night before one of the stones about ten feet below the breast of the dam had suddenly blown out under the pressure, as if an immense punch had been driven in, leaving an oblong opening about three feet by two. A stream from the reservoir now shot through this opening, clearing the collar and thundering down into the gorge. The gate of the spillway on the side had been closed, so that the dam cumulated water as fast as it was completed. Urged on by the conditions of the contract, the builders had allowed the river to rise above the stone before the cement hardened, and it had given way. The scow on the surface of the reservoir was guyed back to either shore by long steel cables. A heavy mattress of timber and brush had been hastily prepared and was being lowered so as to stop the leak temporarily until a permanent stone could be fitted into the hole on the lower side of the dam, a corresponding stone above to be inserted later.

Bill Bevins and John Dakus were the divers employed, and Bevins had just been lowered into the water where he worked, guiding and directing the movements of the mattress as it came down towards the hole.

No one could tell just how it happened—'twas done so quickly. A stir under the sruface—the life-line parted suddenly, the rope which held the diver, became taut, tighter and tighter, parted with a snap, and the poor fellof was gone, sucked through the hole and hurled out into the air, and within the next second lay a shapeless crushed mass 50 feet down on the rock-strewn floor of the chasm. The working crew stood with pallid faces, paralyzed with the sudden horror of it, while some of the men scrambled hastily down the embankment, hoping to recover the body.

Standing a little apart on the deck of the scow, watching the operations with intent eyes, stood a group of three. The general contractor of the work, C. J. Bollivar, a man of middle age, short, keen, with light-gray eyes, and quick, nervous manner that indicated in part the wonderful virility, promptness and energy which had made him a millionaire. J. G. Gould —tall and lean, with rugged features, a man of great resource and ability, who had by his own efforts accumulated a fortune of probably half a million dollars—was the originator of this great project and had been appointed engineer in charge. The United States engineer stood near to see that the conditions under which the government had granted the franchise should be carried out. Bollivar was the first to recover from the stupor which held every one; he sprang with one hand uplifted, shouting:

"Steady, boys, stedy; we can't help poor Bevins, the boys down there will get him; I will see after his widow. Into your suit, Dakus, get down there quick and tell us how we can shift that mattress so as to cover the hole."

The men stood alert, instinctively responsive to the quick, sharp, electric words of command, and the dominating personal magnetism of the man.

All eyes were turned on Dakus as he deliberately began the work of incasing himself in the diving-suit. When he was ready to screw on the round copper helmet with its great glass goggle eyes, not unlike some huge fish, the diver put up one hand, turned to Mr. Bollivar, his face white under its tan, and said, slowly:

"It's almost certain death I'm going to, Mr. Bollivar; what are you going to do for my wife and children?"

Bolivar's face worked for a moment, and every man on the scow found himself leaning forward intent, with clenched hands and rigid muscles strung up like bows, listening to these sharp, quick words, in which one brave man gave his life and the other accepted a trust.

"You can depend on me, John," broke out Bollivar. "The bonus is $20,000. One-foruth of it goes to Bevins' family and another fourth comes to you. I will do this, win or lose. Is that right?"

"Good enough," laconically replied Dakus; "screw her on, boys. Good-by! Good luck!"

Now that the die was cast, the diver's manhood ruled peremptorily. Those around knew, from his tone, that he would stop that hole or the watchers below the dam would need to look for two bodies instead of one.

"God, this is awful!" exclaimed Gould in Bollivar's ear, as the round copper helmet disappeared below the surface of the water. "I don't see how you bear it," he said in a low tone.

"It's a battle, man," replied Bollivar, "and sometimes, as now, sudden death. These men enlisted for the fight. I know what it is; I was a bridge-worker when I was 25.—Steady, everybody!" he shouted, springing to the front, ignoring the foreman. "Watch that air-pump, boys! Keep your hand on the signal-line like you'd count a man's pulse!" He leaned over the side of the scow staring down as though he would pierce the depths with his glance.

There was a whirl in the water and the mattress moved downward a little under the blow of the diver's ax. Following close on the muffled sound, the air-tube parted with a snap, the two men holding a line fastened to the diver were dragged across the deck, and the rope twisted and turned, paying out its full length as it was snatched from their hands, until it brought up with a sharp twang—held by one of the beams of the boat—where it had been fastened as an added precaution. Everyone knew what had happened. They dared not pull, as it would certainly break and Dakus' body go down on the rocks. Even as they looked, the line twisted, ravelled, and parted, where it passed over the scow. This meant the end.

The work went on with feverish ardor, the men's faces white, as they cursed softly. The heavy mattress, released by the blows from Dakus' ax from where it had jammed, had slipped down a few inches; but it became evident now that it must be hammered or weighted still more before it would slip along against the face of the dam, under the surface of the water, and downward so as to cover the hole. A pile-driver reared its tall head from one end of the scow, and the boat was quickly shifted so that it would bear directly over the mattress. The end of a timber was placed against the edge of the massive plug and the blow of the driver shortened, in order that by this means it might be jolted down into place without tearing it to pieces.

Down under the water, unsuspected by the eager workers above, poor Dakus battled valiantly for his life. When his foot slipped he made the last blow with his ax, events followed so quickly that he hardly realized being sucked through the hole in the dam. When he regained conscious thought, he was hanging against the face of the wall, one knee on the ledge which has been described, the broken air-pipe projecting from the helmet and extending ten feet below, the rope fastened to his suit passed up through the hole, jammed hard and fast in some way, while the stream of water shot over his head far out into the gorge. The weight of the heavy leaden shoes of the diver made it difficult for him to move when out of the water, and now they bound him down like ball and chain.

He hung inert until his breath came back, eagerly sucking the air through the broken pipe, realization of his awful situation coming slowly. To move would precipitate immediate death should the rope fail. His eyes traveled along the face of the rock as far as the glasses of his helmet would permit, and he fastened desperately with one hand on a heavy ringbolt, which had been used to lift one of the stones by the crane as it had been placed in position, and afterwards forgotten, instead of being removed as was the custom. As he slowly raised himself to his feet, one hand slipped down to the sharp hatchet in his belt; his eyes glued to the rope where it disappeared upward in the stream of water. He feared they might pull again, hoping to recover his body, when it would be sure to break, or if not that, drag him off his feet against the edge of the opening, which was sharp enough to cut the rope; in that event he would fall backward into the abyss. At the first pull, he intended to cut with his hatchet and trust entirely to the ring-bolt.

Meanwhile his heart stopped its furious pounding, his breath came more slowly, and the cool, daring, muscular fellow was his old self once more, ready to fight to the last. After deliberating for some time—for life hung in the balance—he pressed himself close to the ledge, his left hand clinging to the bolt, and, reaching upward with his right, he struck with his hatchet until the rope parted. It was a frightful risk, for the cumbersome suit pushed him out from the face of the wall until he was overbalanced; the sudden parting of the rope placed great additional strain on the hand which held the ring, and he was forced to drop his hatchet and cling tightly with both hands to the bolt. He had not contemplated such a difficulty.

He dared not release one hand with which to fasten the cut rope to the ring-bolt, because he leaned—overbalanced—above the abyss. He dared not wait, as each minute cost him so much strength; so he must, perforce, release one hand to accomplish anything. Tugging desperately, he managed to flatten the suit on one side and to hug a little closer the face of the dam; balancing there, he tightened his grip on the bolt, and with a quick downward movement caught the broken rope where it dangled from under the arms of his suit. He grasped the ring with both hands just as he swayed over the cliffs, and it seemed to him for a moment that his arms would be torn from their sockets by the strain.

Desperately his fingers worked until he knotted the rope in the ring. At last he was secure from the awful fear of falling, the rope pulling straight away from his chest and holding him securey. Slowly, cautiously, he commenced cutting the suit at the knees with the knife from his belt, and managed to kick off the heavy lead shoes, one at a time, standing now on his stockinged feet. Still more slowly, for his strength was not what it had been, he ripped up the suit on the side under the arm-pits and out to the wrist, where it was held by heavy rubber bands. The great helmet swung and rolled at the end of the rope, and finally rested just where his feet should stand.

Free at last; but free to do what?

The blows from the pile-driver had jolted the mattress down until the hole was closed; but the water still streamed through the openings in the brush, and, unless the interstices should be closed with rock and cement, it was plain to all who watched that the river would not reach the crest of the dam in time. A supply of this material was dumped slowly along the slanting face of the mattress, and at last the water began to gain. Right over the section of the dam where Dakus stood on the ledge below, one course of the masonry was unfinished for a space of 50 feet; but, when the stream began pouring over this lower part, it was estimated that there would be ample in race-ways to complete the conditions of the contract. So Dakus, as he slowly made his way along the ledge, was now under the fall of this water as it poured over the edge above. He could never tell how he made the last ten feet. He continued to move along the narrow ledge, although he knew of no goal to which he might attain; he could scarcely hope to crawl to either end and then climb the face of the wall to the crest of the dam. Blindly, gropingly, he crept along, the increasing volume of water pounding harder each minute on his head and shoulders. Foot by foot, and, towards the last, inch by inch, he struggled, climbing like a limpet, his face pressed against the rock as he dragged himself slowly, strangling—choking—all sense and reason gone except the blind animal instinct to fight for life. Something hard blocked his way, and he found he had reached the side of the race-way, and, to his intense joy, discovered that he was in the corner where the ledge ended, partly sheltered from the falling water by the masonry of a sort of tower where the hinges of the race-way were embedded.

Bollivar, Gould and the United States Engineer had left the scow and now stood on the race-way, intently watching the rising water, so that none of them noticed poor Dakus, as he stood almost directly under their feet, hidden by the thin veil of broken water. The engineer glanced at his watch and remarked quietly:

"Well, gentlemen, I think you will make it."

Bollivar did not seem to hear him, for his eyes were fixed on something below, as though it were a ghost.

"My God, men!" he almost shrieked. "Look there; what is that?"

Gould, with great presence of mind, shouted to the engineer, as his glance followed Bollivar's rigid, outstretched arm:

"It's Dakus! Get me that rope!" As the gray-haired, compactly-built engineer sprang to help. Bollivar shouted to the foreman:

"Run here, all hands; here's Dakus!" He pointed down into the water.

For a second the foreman stood a picture of uncertainty, then shouted back:

"The matress still leaks; if we stop —it will be too late to save the premium."

"D—n the premium!" shouted Bollivar, in a perfect frenzy of excitement. "Save this poor fellow; let the premium go and I'll pay the forfeit!"

The gang from the scow raced, splashing through the water along the top of the dam; but before the men could reach them Gould had swung Bollivar down in a loop of the rope, and it was the millionaire's arm which held poor trembling Dakus, pushing him back into the corner, until ready hands lifted them both into life and safety.

Strong men cried like children, some of them shaking with those dry sobs which are terrible to hear from a man, while others cursed softly, ashamed of their emotion.

The United States engineer could never afterwards tell just where the hands of his watch had pointed at the time, and, really, he did not regret that he could not see. But—the leak was stopped—and the premium was paid.

HOW PROPER SENSE OF SMELL MAY BE RESTORED TO HUMANITY.

—At Etretat, noted French port, it is the custom for each herring boat to take on board a man whose sense of smell is so acute that he can detect the presence of a shoal of herrings by its means, and can even, so Captain Irwin tells us in Fishing Gazette, discriminate between herrings and dogfish! Such a nose would be simply invaluable to entomologists, engaged in investigating insect scents, work in which a keen, discriminating nose is absolutely essential. The experimenter first lightly breathes on the butterfly or other insect, or else strokes it with a camel-hair pencil. Then he holds it with open wings close to his nostrils, and inhales gently, but is careful not to sniff. A bewildering number of scents has thus been detected.

Naturally the power of smell varies much in different people, and would appear to be particularly developed in the Chinese, to whom Europeans are said to smell like sheep. Efforts are beginning to be made to train the sense of smell in little children by making them guess the names of flowers, etc., from the scent alone, and it will be interesting to see how far it is possible to educate this faculty, which through neglect we have permitted to deteriorate. Whether a highly developed nose will prove an unmixed blessing must be left to the coming generation to decide.

PAST STILL VITAL IN JAPAN

Why Ancient Heroes Are Able to Exert an Enormous Influence on the People's Minds.

No wonder that Japan's past is a living past, Gertrude Emerson writes in Asia Magazine. The ancient heroes are not dead, but exert their subtle influence through the intimate contacts of the daily life of the people. One meets them under a thousand guises—as legends imprinted on the common blue and white towels upon which the people wipe their hands, as the ever-fresh inspiration for artists in choosing subjects for their paintings, in the commemoration festivities at the countless temples, in the allusions scattered through the "Hundred Poems," familiar to the lips of every man, woman and child in Japan, reappearing in the classic "Noh" dramas inherited from the fourteenth and fifteenth centuries, in the popular theaters, and, finally, so that no one may escape, in the "movies." All the really cultural roots of Japan are buried deep in the past, and although the Japanese student of today is thrust unceremoniously into a modern school system of western derivation, his western education sits but lightly upon him. He never breaks free of his own inherited influences, which are peculiarly strong, his own angle of vision, which still has its feudal slant.

How Machine Guns Work.

An automatic machine gun can discharge 250 cartridges of a fully loaded belt in less than 25 seconds. The loading of the cartridge belts is, in comparison, a leisurely occupation. To slip 250 separate cartridges, by hand, into their individual loops in the cartridge belt is tedious and expensive. To expedite matters, a little loading device has been evolved.

Layers of cartridges, as they are removed from the standard box of cartridges, are slipped into the vertical guide, the belt entered between feed wheels of the loading device and the crank, turned, just as one would operate the handle of an ice cream machine. The cartridge belt issues on the near side with a cartridge properly inserted in each successive belt loop. In a very few minutes the belt is fitted with its complement of 250 cartridges and is ready for immediate use.

How Waste of Light Is Prevented.

One of the considerable sources of fuel waste is the unnecessary burning of electric lights. A large percentage of lights are used chiefly for limited periods, as for instance in cloak rooms. They are turned on and then heedlessly left burning. Thus we are constantly recommended to shut off needless lights as a matter of national saving.

An invention designed to remedy this condition is the work of J. E. Lewis of New York. By pushing a button the light is turned on and glows for a predetermined period—say, five or ten minutes—and then is automatically cut off. The device has been tested and found practical and seems useful in the way of checking electric light waste.

How Finger Replaced Thumb.

A wonder of modern surgery was seen by the king and queen in the course of their visit of inspection to the Reading war hospital No. 1. Private Beesley, who was a pianist before he became a soldier, had the thumb of his right hand shot away in action. The surgeons, foreseeing that this would be a grave handicap to him again in civil life, undertook to transplant the third finger of his left hand on the place where his thumb had been. The operation was quite successful, and Private Beesley told the king that he expected to be able to play again as well as ever.—London Mail.

HAYNES M'FADDEN HEADS CAMPAIGN IN VICTORY LOAN

Widely-Known Financial Editor Succeeds W. C. Wardlaw, Who Becomes Associate Director

Haynes McFadden, of Atlanta, publisher of the Southern Banker, has been appointed chairman of the executive committee for the Sixth Federal District in the Victory Loan campaign, it was announced this week by Governor Joseph A. McCord, head of the district war loan organization. He succeeds W. C. Wardlaw, chairman for four successful campaigns, who has been made associate director and assistant to Governor McCord in the war loan work. Mr. McFadden has been active in former campaigns, and was vice chairman in the fourth Liberty Loan drive.

Haynes McFadden

A very large proportion of the counties in the Southern States have adopted the individual quota system for the Victory Loan, and expect thereby to distribute the investments in securities over wider ground. By this system, every citizen will be assigned a definite quota which he is expected to take, just as states and counties have their quotas. This will be based on his income and property, and will be subject to change by a local appeals committee if he feels his quota has been fixed at too high a figure.

In previous campaigns, counties which used the individual quota plan went over the top quickly and by a large margin, without placing the burden of heavy investments on comparatively few patriotic citizens. This plan makes every man feel certain that his neighbor also is carrying his share of the obligation to his country.

THE VICTORY LOAN MUST BE FLOATED--- WE'LL FINISH THE JOB

Fathers And Mothers Of Boys Who Risked All Will See That The Bills Are Paid

The Victory Loan, fifth and last of the national Liberty Loans, will be put over in the campaign beginning April 21 and continuing three weeks, as enthusiastically and completely as were the preceding loans. That is certain, as indicated by the responses from the loyal workers who are ready to give their services to their country until the job is finished and the bills all paid.

Whatever spirit of "let down" that may have followed the signing of the armistice is rapidly disappearing, and the whole country is awakening to the realization that the war is not over and will not be over until the last of the American soldiers is safe at home again and every dollar of the gigantic war bill paid. The fathers and mothers of the boys who went overseas or to camp, who risked their lives for their country—and many of them gave life or limb—will not quit until the job is finished, any more than the soldiers quit over there.

The Victory Loan campaign will soon be on. The government has decided upon a five billion dolar issue of short term securities, to be repaid within five years, and bearing attractive interest rates. Secretary Glass believes this form of security will command a better market price after the campaign than would bonds issued for a longer term of years.

Every man in the country will be asked soon to subscribe to the Victory Loan. It is time to be getting ready for it.

SHORT TERM BONDS.

The government has decided upon short term bonds, to be redeemed in from one to five years, for the Victory Loan, instead of bonds maturing in fifteen to twenty years.

Secretary of the Treasury Carter Glass feels convinced that these securities will command a higher market price than those covering a longer period.

How Forest Fires Are Started.

That man is at least three times as destructive as nature, at least so far as forest fires are concerned, is revealed in a compilation which has just been issued by the federal forest service. The figures of this agency show that of 7,814 forest fires on government lands during 1917, all but 2,132 were caused by human agencies.

Over 962,000 acres of timber, forage and young growth to the value of $1,358,600 was destroyed. This loss, while larger than that of the past few years, is considered remarkably light in view of the unusually dangerous conditions which, owing to protracted drought and periods of high winds, were practically the same as in 1910, when many persons were burned to death and $25,000,000 worth of timber on the national forests was destroyed. It is estimated that in addition to the actual loss in timber, etc., $1,121,451 was spent by the government for the purpose of fire fighting and prevention.

TO JOHN W. WHEELER TRUSTEE. AND THE NEW HOME SEWING MACHINE COMPANY

Mary Elizabeth Trotter et al. vs. Samuel B. Trotter, et al.

State of Tennessee, In Chancery Court of Knox County. No. 16524

In this cause, it appearing from the bill filed, which is sworn to. that the defendants, John W. Wheeler Trustee. and Home Sewing Machine Company are non residents of the State of Tennessee, so that the ordinary process cannot be served upon them, it is ordered that said defendants appear before the Chancery Court at Knoxville, Tennessee, on or before the 1st Monday of May next. and make defense to said bill, or the same will be taken for confessed and set for hearing, ex parto, as to them. This notice will be published in the Knoxville Independent for four consecutive weeks.

This 22nd day of March 1919

J. C. FORD, C. & M.

A. C. Grimm, Sol.

March 22 29 April 5 12 1919

NOTICE OF INSOLVENCY.

To the Creditors of Martha Watson, deceased; I. the undersigned administrator of the estate of Martha Watson, deceased. having suggested to the County Court Clerk of Knox County, Tennnessee the insolvency of said estate, do hereby notify all persons holding claims against said estate to file said claims, duly authenticated in the manner prescribed by law with the County Court Clerk of said county on or before the 30th day of June 1910 or same will be forever barred in law and equity.

Any one indebted to the said estate is requested also to make settlement with me at once.

This 22nd day of March 1919

A. E. Dunsmore. Administrator

S. E. Hodges, Sol.

Mar 22 29 Apr 5 12 1919

WHY

Ostrich Owners Are Congratulating Themselves

The fact that their feathers are to be worn on milady's hat this winter has just saved 800 birds from extinction, according to the San Francisco Chronicle.

When the war broke out it hit the ostrich plume industry, and hit it hard. Ostrich plumes were a drug on the market, and thousands of fine birds owned by Arizona ostrich growers were sold for almost nothing.

Most of them were bought by other concerns at what seemed to them at the time bargain prices. But the plume market failed to revive, and what ostriches remained were eating their heads off. The California ostrich men were not buying any more birds. They had more than they knew what to do with. Then it was that somebody suggested eating them.

Last spring Phoenix owners decided that they could no longer keep the birds. The matter of marketing the ostriches as meat was taken up with T. A. Riordan, food administrator for Arizona, and he gave his consent. A committee had the task in charge, and soon had all arrangements completed. The ostriches were to be slaughtered at the ranch and rushed to the city, where they would be placed in cold storage prior to selling. The wholesale dealer was all ready. The shops that were to handle ostrich meat at retail had been announced.

Then the good news came.

DUE TO THEIR MILK DIET

Why Yanks Are Noted for Their Physical and Moral Courage Is Explained by Dairyman.

American soldiers have displayed such wonderful physical and moral courage at the front because they are from a dairy nation and are milkfed, is the conviction of M. D. Munn of St. Paul, president of the National Dairy council.

Speaking at the dairy show held in Columbus, O., the other day, Mr. Munn said, "At one time the dairy show very erroneously compared the food value of milk and meat as being equal. Milk has just as much nutritive value as other foods, but more than that, it contains something other foods do not contain. A quart of milk supplies the essential elements of child growth which no other food contains."

He continued, saying, last year this country produced approximately 90 billion pounds, equal to 45 billion quarts of milk, and yet taking from this the amount used in condensed milk, butter, cheese and ice cream there is left only about a glass of milk a day for every person in the United States. Milk made up 19 per cent of the American diet last year.